

Fig. 3.49: Profile of Wall 406



Fig. 3.50: West elevation of Wall 407

CEA	Client: Volker Stevin	Drawn by:	Date: 12/03/2024
ARCHAEOLOGY LTD	Project: New Wear Footbridge, Sunderland	Checked: SW	Report No: 4414



Fig. 3.51: South elevation of concrete Structure 408 and Wall 409



Fig. 3.52: East elevation of Wall 410

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Fig. 3.53: Profile of Wall 410



Fig. 3.54: Plan of Wall 410

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Fig. 3.55: West elevation of Walls 415 and 416



Fig. 3.56: South elevation of Walls 415 and 416

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Fig. 3.57: Oblique view of Walls 415 and 416



Fig. 3.58: Location of Walls 415 and 416. West facing representative section in South Pier pit showing Made Grounds 402 and 403, approximately 7m below ground level

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Fig. 3.59: Wooden sleepers against the retaining wall showing marks in reinforcement concrete, north-western access ramp to South Pier pit



Fig. 3.60: Location of wooden sleepers against the reinforcement of the retaining wall, north-western access ramp to South Pier pit

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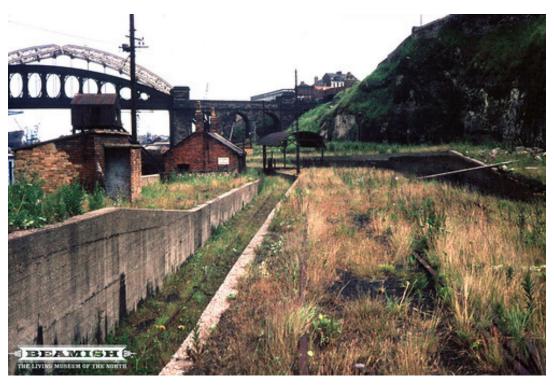


Fig. 3.61: Buildings on the south bank of the River Wear, 1968 (from the Beamish Collections, Photo Number: 186188, extracted from: https://www.flickr.com/photos/beamishmuseum/4894167819/)

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## **APPENDIX 1: Context Summary**

Context No.	Area	Туре	Length (m)	Width (m)	Height/Depth	Description
101	Area 1	Topsoil	90	35	0.25-0.4	Dark greyish brown sandy silt, loose, with inclusions of modern refuse, metal, building waste and asbestos. Same as 501.
102	Area 1	Made Ground			0.05-0.4	Dark grey-black sandy silt, friable, with frequent inclusions of coal and ashes. Also modern refuse, metal and building waste. Same as 502.
103	Area 1	Made Ground			0.1-1.2 (exposed)	Mid-yellow-orange mottled brown silty clay, friable, with inclusions of modern brick and large lumps of concrete bound stone.
104	Area 1	Made Ground			>0.8 (exposed)	Dark greyish brown sandy and clayey silt, with inclusions of building waste and metal.
201	Area 2	Topsoil	130	29	0.06-0.15	Mid-greyish brown sandy and clayey silt, friable, with inclusions of construction waste and metal, stones and rooting.
202	Area 2	Made Ground			0.25-0.8	Dark grey-black sandy silt, friable, with frequent inclusions of coal and ashes. Also construction waste, metal and modern refuse.
203	Area 2	Natural				Light yellow sandy silt, friable to compact, with very frequent limestone inclusions.
204	Area 2	Wall	35	0.6	>1.2 (exposed)	East to west orientated wall composed of squared limestone blocks. Parallel to similar Wall 206 to the south.
205		•	•	•		VOID
206	Area 2	Wall	10	0.45	>0.3 (exposed)	East to west orientated wall composed of squared limestone blocks. Parallel to similar Wall 204 to the north.
207	Area 2	Wall	41	0.4	>0.33 (exposed)	East to west orientated wall composed of red brickwork. Parallel to similar Wall 208 to the north.
208	Area 2	Wall	>38 (exposed)	0.40-0.55	>0.40 (exposed)	East to west orientated wall composed of red brickwork. Parallel to similar Wall 207 to the south.
209	Area 2	Wall	4	0.4	N/A	East to west orientated wall composed of red brickwork. Likely continuation of Wall 207 to the west, in perfect alignment.
301	Area 3	Topsoil	70	15-20	0.08-0.15	Mid-greyish brown sandy and clayey silt, friable, with inclusions of construction waste and metal, stones and rooting.
302	Area 3	Made Ground	>70 (exposed)	>20 (exposed)	>0.15 (excavated)	Dark grey-black sandy silt, friable, with frequent inclusions of coal and ashes. Also construction waste, metal and modern refuse.
303						VOID

Context No.	Area	Туре	Length (m)	Width (m)	Height/Depth (m)	Description
401	South Pier	Topsoil	30	20	0.1-0.45	Mid-greyish brown sandy and clayey silt, friable, with inclusions of construction waste and metal, stones and rooting.
402	South Pier	Made Ground			0.9-5.5	Dark grey-black sandy silt, friable, with frequent inclusions of coal and ashes. Also construction waste, metal and modern refuse.
403	South Pier	Made Ground			>3m (excavated)	Light yellow sandy and clayey silt, friable to compact, with very frequent limestone inclusions. Redeposited natural geology, similar to 203 exposed in southern end of Area 2.
404	South Pier	Wall	0.5	0.46	1.25	North to south orientated wall composed of red brickwork. Abutted Wall 405.
405	South Pier	Wall	2.3	0.48	>0.25 (exposed)	North to south orientated wall composed of squared limestone blocks. Abutted by Wall 404.
406	South Pier	Wall	0.7 (exposed)	0.5	>0.82 (exposed)	East to west orientated wall composed of squared limestone blocks. Likely continuation to the east of Wall 405 forming south-west corner of a building structure. Abutted by Wall 407 and concrete Structure 408.
407	South Pier	Wall	2.1	0.24	>0.43 (exposed)	North to south orientated wall composed of red brickwork. Abutted Wall 406 and abutted by concrete Structure 408.
408	South Pier	Structure	2.3	0.45	0.15	East to west orientated possible concrete foundations for Wall 409, abutted by it. Concrete Structure 408 abutted Walls 406 and 407.
409	South Pier	Wall	0.82	0.45	0.22	East to west orientated wall composed of red brickwork. Abutted concrete Structure 408.
410	South Pier	Wall	1.6	1	0.4-1.2	North to south orientated wall composed of limestone blocks.
411						VOID
412						VOID
413						VOID
414						VOID
415	South Pier	Wall	0.95-1.2	N/A	0.6	North to south and east to west orientated wall composed of squared limestone blocks.  Likely foundations for abutting Wall 416, forming south-west corner of a building structure.
416	South Pier	Wall	0.65-1.2	N/A	0.8-1	North to south and east to west orientated wall composed of red brickwork. Abutted Wall 415, forming south-west corner of a building structure.
501	North Pier	Topsoil	20	8	0.1-0.15	Mid-greyish brown clayey silt, friable, with inclusions of construction waste and metal, stones and rooting. Same as 101.
502	North Pier	Made Ground			0.1-1.9	Dark grey-black sandy silt, friable, with frequent inclusions of coal and ashes. Also construction waste, metal and modern refuse. Same as 102.

Context No.	Area	Туре	Length (m)	Width (m)	Height/Depth (m)	Description
503	North Pier	Natural				Light brownish yellow clayey silt, friable to compact, with very frequent natural limestone inclusions.
504	North Pier	Wall	3.95	0.12	0.75	Northeast to southwest orientated slanted wall composed of red brickwork. Parallel to similar opposite Wall 508. Abutted by Floor 505 and foundation Layer 507.
505	North Pier	Floor	4.1	1.95	0.08	Northeast to southwest orientated floor surface composed of red brickwork. Abutted foundation Layer 507 and Walls 504 and 506.
506	North Pier	Wall	4.1	0.35	0.16	Northeast to southwest orientated wall composed of red brickwork. Abutted by Floor 505 and foundation Layer 507.
507	North Pier	Layer	4.1	1.95	0.2	Foundation layer composed of light brownish yellow silty sand and limestone, loose, underneath Floor 505 and abutted by it. Abutted Walls 504 and 506.
508	North Pier	Wall	4.8	0.12	1.05	Northeast to southwest orientated slanted wall composed of red brickwork. Parallel to similar opposite Wall 504.
601	North Abutment	Topsoil	20	20	0.1-0.15	Dark greyish brown sandy silt, loose, with inclusions of modern refuse, metal and building waste.
602	North Abutment	Made Ground			0.1-0.4	Dark grey-black sandy silt, friable, with frequent inclusions of coal and ashes. Also modern refuse, metal and building waste.
603	North Abutment	Made Ground			>0.8 (excavated)	Mid-yellow-orange mottled brown silty clay, friable, with occasional inclusions of building waste.
604	North Abutment	Wall	>20 (beyond site LOE)	0.24	0.8-1.1	East to west orientated wall composed of red brickwork. Abutted Structure 605. Part of listed industrial complex to the northwest.
605	North Abutment	Structure	>20 (beyond site LOE)	N/A	0.4-0.6	East to west orientated possible concrete foundations for Wall 604, abutted by it.

## **APPENDIX 2: Written Scheme of Investigation**



New Wear Footbridge

archaeological watching brief written scheme of investigation 20364

on behalf of Sunderland City Council

#### 1. Project background

1.1 A development is planned for a new footbridge across the River Wear at Sunderland (Figures 1 and 2). This document outlines the construction methodology within three areas of the proposed development (Figure 2). Works in these three areas are anticipated to have no impact on any archaeological resource and will be overseen by an archaeological watching brief where necessary, such that pre-determination evaluation works will not be required in these areas. This document comprises a Written Scheme of Investigation for the archaeological watching brief (Figure 2).

#### **Previous works**

1.2 A scheme of archaeological works has been undertaken on the area north of the river<sup>1</sup>. An archaeological desk-based assessment was subsequently undertaken for a wider area around the proposed development<sup>2</sup>. The results of the assessment are summarised below. Archaeological trial trenching has been undertake across the wider area but no intrusive archaeology has been undertaken within the three areas considered here.

#### Archaeological background

- 1.3 Extensive remains of prehistoric settlement, dating from the Mesolithic period through to the Iron Age, are present in the flat upper plateau above the cliffs south of the river. Excavations ahead of development for The Beam revealed evidence of activity dating from the Mesolithic through to the Bronze Age<sup>3</sup>. Trial trenching across the former Vaux site also revealed evidence of prehistoric occupation<sup>4</sup>. There is no known prehistoric activity within the proposed development areas considered here.
- 1.4 The proposed development areas may have been utilised as agricultural land during the medieval period. The area north-east of area 1 is recorded on historic maps as Sheepfolds, a name which probably dates to the medieval period. South of the river, traces of medieval ridge and furrow cultivation have been recorded on the upper plateau above areas 2 and 3.

<sup>&</sup>lt;sup>4</sup> Glover, G, & Allen, E, 2004 *An archaeological evaluation at the former Vaux Brewery, St. Mary's Way, Sunderland, Tyne & Wear.* Pre-Construct Archaeology Ltd



<sup>&</sup>lt;sup>1</sup> NAA 2017 Sheepfolds, Sunderland Tyne and Wear: archaeological desk-based assessment, building recording and geological assessment. NAA report 17/059

<sup>&</sup>lt;sup>2</sup> Archaeological Services 2020 Expanded Former Vaux Site, Sunderland, Tyne and Wear: archaeological desk-based assessment. Archaeological Services Durham University report 5424

<sup>&</sup>lt;sup>3</sup> Archaeological Services 2019 Former Vaux Brewery site, Sunderland, Tyne and Wear: post-excavation full analysis. Archaeological Services Durham University 5026.

- 1.5 The areas north and south of the river saw development during the post medieval period. Map evidence indicates that there was a shipyard on Area 1 (H4692). The shipyard was founded in the early 19th Century and closed in 1933. In the wider area lime kilns, foundries, potteries and timber yards are recorded on the historic maps from the middle of the 19th century (Figure 3). A waggonway was constructed in 1790-1800 which ran from the upper industrial areas down to the river. There is the potential for archaeological remains relating to the shipyard to survive in Area 1.
- 1.6 South of the river historic maps show that there was established industrial activity by 1827. Waggonways ran into the area from the west, through Area 2 to Area 3. The Newbottle Drops are labelled on the riverside, on the north edge of Area 3. The watercourse of Galley's Gill runs though Area 2.
- 1.7 By 1851 the waggonways have been developed and a new waggonway runs through Area 2 from a coal depot to the west. The drops to the east in Area 3 have also been developed and are now labelled Lambton Coal drops. Galley's Gill is no longer shown and has been culverted by this date.
- 1.8 Lambton Drops were the northern terminus of the Lambton Waggonway (HER 2833). The railway was built in 1815 to bring coal from inland to the river where it could be loaded onto sea-going colliers. Major modifications occurred from 1865 to 1890s and by the time of the 1897 OS map railway lines cover most of the riverside area (Figure 4). An archaeological evaluation conducted immediately east of Area 3 in 2017<sup>5</sup> revealed a fragment of a brick wall, a cast iron pipe trench, and a large timber post set into bedrock. These features may relate to the former railways on the site.

#### 2. Capability statement

- 2.1 Archaeological Services Durham University specialises in the provision of services associated with planning permission in the north-east region. We have an established record of working with developers, architects, major industrial firms, and local and central government bodies. Archaeological Services incorporates a range of in-house services including palaeoenvironmental archaeology, artefact conservation, geophysical survey and building recording.
- 2.2 Archaeological Services is a leading service provider in the northern region, where we conduct over 300 projects annually. These include excavation works on numerous industrial site, similar to those that may be present on the development site.

#### **Standards**

2.3 All Archaeological Services project personnel will abide by the Chartered Institute of Field Archaeologists' (CIfA) Code of Conduct (2014). The works will be conducted in accordance with the CIfA's Standard and Guidance (2014) and Yorkshire, the Humber and the North-East: A Regional Statement of Good Practice for Archaeology in the Development Process (SYAS 2019).

#### **Personnel**

2.4 The project will be managed by Natalie Swann BSc who has considerable experience of archaeological projects of this type gained in northern England over the last 20 years. Suitably qualified and experienced members of our field team will also be assigned to the project.

<sup>&</sup>lt;sup>5</sup> Archaeological Services 2017 *The Launch, Former Vaux Brewery, Sunderland, Tyne and Wear: archaeological mitigation works.*, Archaeological Services Durham University report 4562

#### 3. Groundworks and impact

- 3.1 Groundworks are proposed in three areas, two crane pads and a site compound (Figure 2).

  Details of anticipated depth of groundworks and potential impact on any archaeological resource is detailed below for each area.
- 3.2 The developer should liaise with the appointed archaeological contractor about the depth of excavation before work commences. The appointed archaeological contractor should be notified if it becomes apparent during the works that the depths of excavation will change so that when and where necessary archaeological monitoring can take place.

#### Area 1: North Crane Pad

3.3 Between 0.1m and 0.2m of topsoil will be stripped from the crane pad area and the ground built up with concrete or granular material to form a foundation for the crane. This area lies over potential remains of a 19th century shipyard shown on historic ordnance maps. Due to the shallow depth of works it is anticipated that there will be no impact on the archaeological resource.

#### Area 2: South Site Compound

This area lies over potential archaeological remains relating to waggonways running to the coal drops, and the infill of Galleys Gill. Between 0.1m and 0.2m of topsoil will be stripped from the area and the ground built up with concrete or granular material. No excavations will be undertaken for drainage or other services. Waste and fresh water will be stored in tanks above ground. Given the shallow depth of proposed works it is anticipated that there will be no impact on the archaeological resource.

#### Area 3: South Crane Pad

3.5 This area lies over potential remains of the Lambton waggonways and coal drops. Between 0.1m and 0.2m of topsoil will be stripped from the crane pad area and the ground built up with concrete or granular material to form a foundation for the crane. Due to the shallow depth of works it is anticipated that there will be no impact on the archaeological resource.

#### 4. Archaeological Works

- 4.1 As groundworks on Areas 1, 2 and 3 are expected to have no impact on the archaeological resource, any works deeper than 200mm will be subject to archaeological monitoring. Topsoil will be removed by a mechanical back-acting excavator using a toothless ditching bucket, under close archaeological supervision.
- 4.2 The tasks this project comprises may be summarised as:
  - watching brief on the topsoil strip for two crane bases and a site compound
  - hand-excavation, sampling and recording of any archaeological deposits
  - post-excavation works
  - reporting
  - archive preparation

#### **Research objectives**

4.3 Archaeological Services will complete works within the research priorities set out in *North-East Regional Research Framework* (NERRF). This project has been designed to address research objectives:

Post-medieval

PM1: Early coal industry and coal use

PMii: Industrialisation

PMvii: Industrial intensification

- 4.4 Excavation of any archaeological deposits identified will proceed by hand, using standard archaeological procedures in accordance with our *Recording Manual* (v.5.5 2020). Areas where no archaeological features are present will also be recorded. All suitable deposits will be subject to a palaeoenvironmental sampling strategy, as outlined below.
- 4.5 Archaeological features will be hand-cleaned, sectioned, sample excavated and recorded in plan and section. Archaeological deposits will be sampled as is necessary to establish their nature and extent. This will include the investigation of 20% of linear features and investigation of all intersections, half-sectioning of pits, and full excavation of postholes.
- 4.6 The stratigraphic matrices will be established on site during the course of the works. Trench location, the 3-D provenancing of artefacts, identification of the levels of features and sections, and planning of features will be conducted via a Leica GS15 global navigation satellite system (GNSS) with real-time kinematic (RTK) correction. Hand-drawn plans will be drawn at a scale of 1:20, sections at a scale of 1:10.
- 4.7 Photography will be digital; images may be included in the report as appropriate. Digital images will be captured at a minimum resolution of 10 mega-pixels and saved in an appropriate format for long term storage in accordance with Digital Image Capture and File Storage (Historic England 2015).

#### Palaeoenvironmental sampling

4.8 Bulk palaeoenvironmental samples will be collected from the fills of stratigraphically secure cut features, and from other secure deposits that have the potential to provide palaeoenvironmental or economic information. Industrial residues and waste from craft and manufacturing processes will also be sampled appropriately. The size of sample collected and assessed will depend on the apparent potential value of the deposits.

#### **Artefact recovery**

4.9 Bulk finds such as pottery and animal bone will be collected by context. Where unusually large quantities of finds, or very small types of material are encountered (e.g. fish bones), such that recovery by hand is not practicable, soil samples may be retained for sieving in the laboratories at Durham. Artefacts will be removed from site to a secure location at the end of the working day. A discard policy may be implemented following assessment by artefactual specialists. All artefacts that are retained will be washed, marked and bagged in a manner suitable for long-term storage. If any artefacts which fall under the *Treasure Act* (1996) are discovered then the appropriate procedures will be adhered to. Treasure will be reported to the Portable Antiquity Scheme Finds Liaison Officer within 2 weeks of excavation of treasure, or identification of it as treasure.

#### Conservation

4.10 All field personnel are trained in artefact first aid and procedures for the recovery, packing and transportation of artefacts, following *First Aid for Finds* (2nd Edition). Where delicate artefacts are uncovered, appropriate immediate measures will be taken, and the artefacts will be transferred to the Conservation Laboratory at Durham for stabilisation. Should particularly complex conservation requirements become apparent, an appropriately qualified and experienced expert will be called to site to excavate and package the object.

#### **Scientific dating**

4.11 Samples of material suitable for scientific dating techniques including AMS C14 dating (for example, charred seeds from palaeoenvironmental samples), archaeomagnetism (for example, in situ substantively burnt clay from appropriate contexts that are otherwise undated) or thermoluminescence will be collected where appropriate. Recommendations for dating may be made in the assessment report. Advice on dating will be sought from the Historic England Regional Science Advisor as appropriate.

#### **Human remains**

4.12 It is considered unlikely that human remains will be encountered at this site. If such finds are made the remains will not be removed unless this is absolutely necessary. Where it is necessary to excavate the remains, the appropriate licence will be obtained from the Ministry of Justice. The client and Tyne and Wear Archaeology Officer will be informed.

#### **Health & Safety**

- 4.13 Archaeological Services abides by the 1974 Health and Safety Act, its subsequent applicable statutory amendments, including the Management of Health and Safety at Work Regulations 1999, the 2015 Construction Design and Management Regulations, RIDDOR 2013, and the Control of Asbestos at Work Regulations 2012. Archaeological Services is accredited by the CQMS Safety Scheme.
- 4.14 Archaeological Services provides health and safety training for all our field personnel in first aid, manual handling, cable detection, site safety and risk assessment. Archaeological Services ensures that all personnel pass the CITB Construction Skills Health and Safety Test and subsequently become CSCS card-carriers (Construction Skills Certification Scheme).
- 4.15 Archaeological Services will provide qualified First Aiders and first aid supplies at all times during work. All staff members are supplied with appropriate safety clothing and equipment. It is assumed health and safety will be the responsibility of the main contractor on site.

#### Liaison and monitoring

4.16 Records will be kept of the date, time and duration of site visits, together with the number of personnel involved and any actions taken. Reasonable access will be provided by Archaeological Services to the client and representatives of the planning authority for monitoring purposes during fieldwork and any other stage of the works as required.

#### 5. Post-excavation assessment, reporting and archiving Post-excavation assessment

- An interim statement will be produced following the completion of the evaluation, for the Client, Planning Authority, and Tyne and Wear Archaeology Officer if required.
- Assessments of the excavated material will be made, following the recommendations of *Management of Research Projects in the Historic Environment (MoRPHE)* guidance (Historic England 2015). Each class of artefact recovered from the site will be examined to determine the potential of the material for further analysis, and to establish any conservation requirements. Assessment reports will state the potential of each class of artefact or ecofact, in accordance with *MoRPHE*; they will also set out the storage and conservation requirements of the assemblage, and make recommendations for a discard policy if this should be appropriate.
- 5.3 The following specialists may be called on, as necessary, to examine, process and assess the excavated material. In the first instance the artefactual assemblage will be assessed by the

Archaeological Services post-excavation manager and following this other specialists employed by Archaeological Services may be called on as required.

Roman pottery Alex Croom prehistoric pottery Dr Rob Young animal bone Dr Louisa Gidney medieval / post-medieval artefacts Alejandra Gutierrez coins and tokens Richard Brickstock Jennifer Jones other artefacts Jennifer Jones post-excavation manager Jennifer Jones fuel residues palaeoenvironmental remains Dr Charlotte O'Brien

conservation Vicky Garlick
human bone Dr Anwen Caffell

#### The report

wood identification

- A report will be prepared in a form suitable for use by the client, the planning authority, and the Tyne and Wear Archaeology Officer. A digital copy will be provided in pdf format and hard copies will be supplied on request. Reporting will adhere to the reporting requirements for the Council. This will include the deposition of one bound hard copy with the Historic Environment Record (HER).All drawn work will be to publication standard. The report will include:
  - Location plan of excavation area and grid reference of site
  - Site narrative interpretative, structural and stratigraphic history of the site
  - Plans showing features and deposit spreads, by phase if possible, and section/elevation locations

Dr Charlotte O'Brien

- Sections / photographic elevations to scale (mOD)
- Artefact and ecofact assessment reports
- Tables and matrices summarising features, artefacts, and sequences
- Descriptions of contexts, grouped by phase where appropriate
- Photographs of archaeological features
- A consideration of the results of the fieldwork within the wider research context (ref. NERRF)
- Recommendations for further works on the material recovered if appropriate

The report will be based on the following format:

- 1. Summary
- 2. Project background
- 3. Archaeological background to the site
- 4. Landuse, topography and geology
- 5. Excavation sequence
- 6. Artefact assessment
- 7. Ecofact assessment
- 8. The archaeological resource
- 9. Recommendations
- 10. Sources

Appendix 1: Data tables

Appendix 2: Stratigraphic matrices

#### **Archive**

5.5 The project archive will be prepared to the standard specified in MORPHE and in accordance with the *Guidelines for the Preparation of Archaeological Archives for Long Term Storage* (UKIC 1990). The archive will be deposited Tyne and Wear Museum Service in accordance with Tyne and Wear Archiving policy. Deposition is likely to take place on completion of any further phase of works on the wider site, and the archive will be held by Durham University in the meantime.

#### **OASIS**

Archaeological Services Durham University is registered with the Online AccesS to the Index of archaeological investigationS project (OASIS). An OASIS form will be completed for this project. The project report will be uploaded to OASIS within three months of finalisation of the report and will become a publicly accessible document.

#### **Publication**

5.7 Recommendations for publication will be made if required following completion of the works (including any further schemes of works). The nature and extent of the publication will be dependent on the results of the work.

#### Copyright

5.8 This project is copyright. Copyright in the project report will rest with Archaeological Services Durham University unless specific arrangements are made for its assignment elsewhere. Tyne and Wear Council will have permission to use the report for the purposes of the HER. This may include photocopying by third parties.

#### 6. Programme

- 6.1 The project can be completed to the following programme:
  - following validation of the WSI fieldwork can start at any time
  - it is anticipated that following the completion of fieldwork the project report can be provided within fifteen working days

Natalie Swann BSc Senior Archaeologist February 2020



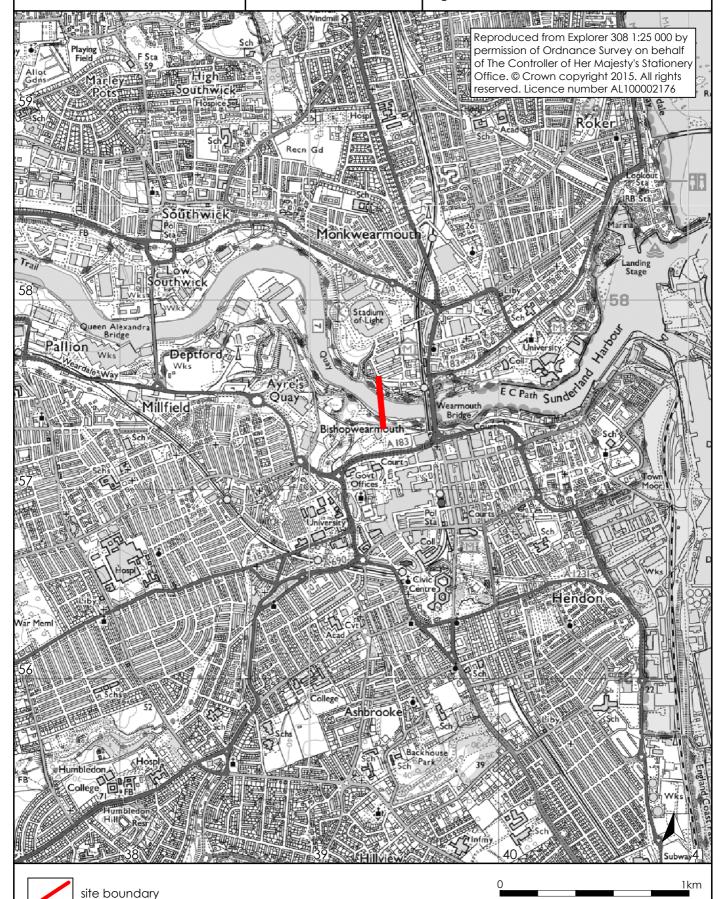
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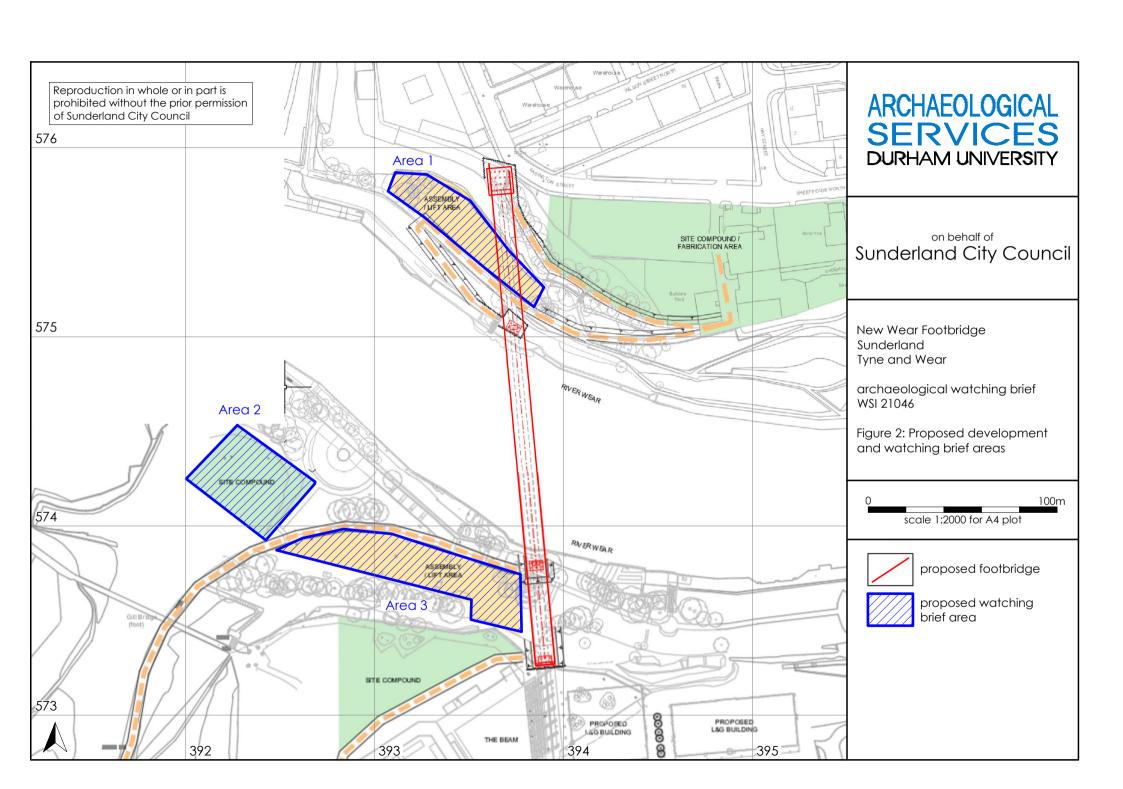
Sunderland City Council New Wear Footbridge Sunderland Tyne and Wear

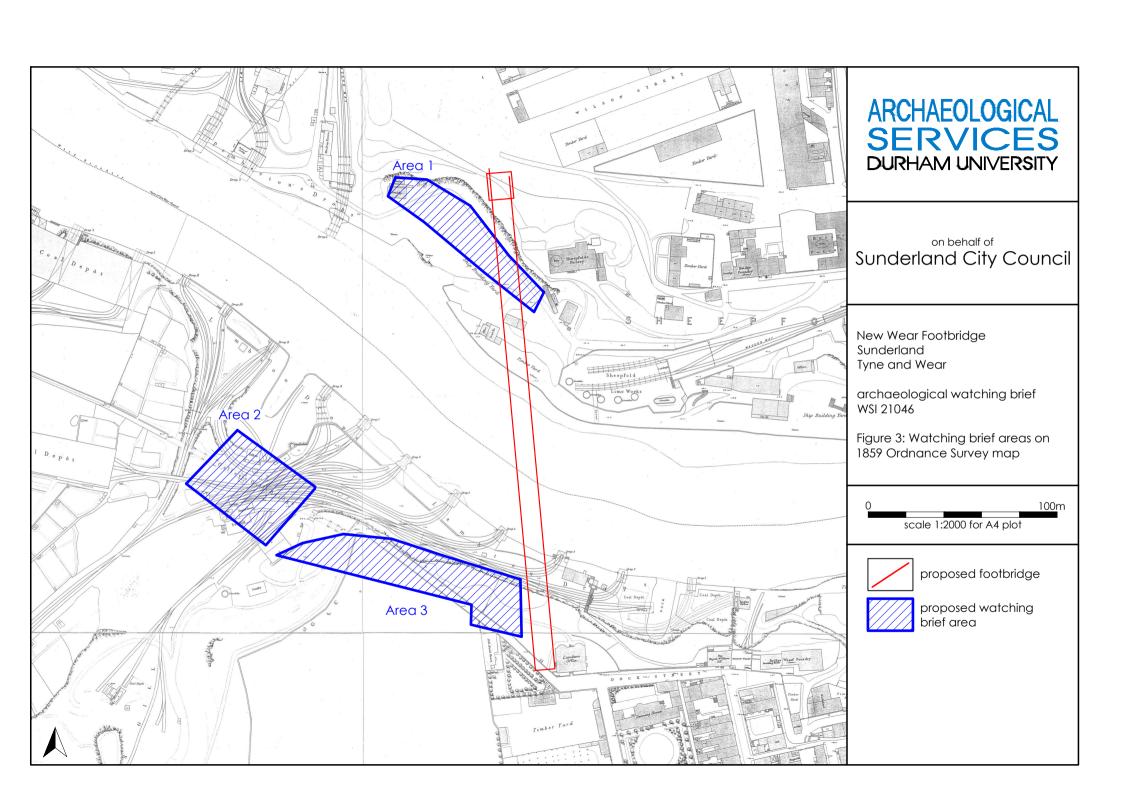
archaeological watching brief WSI 21046

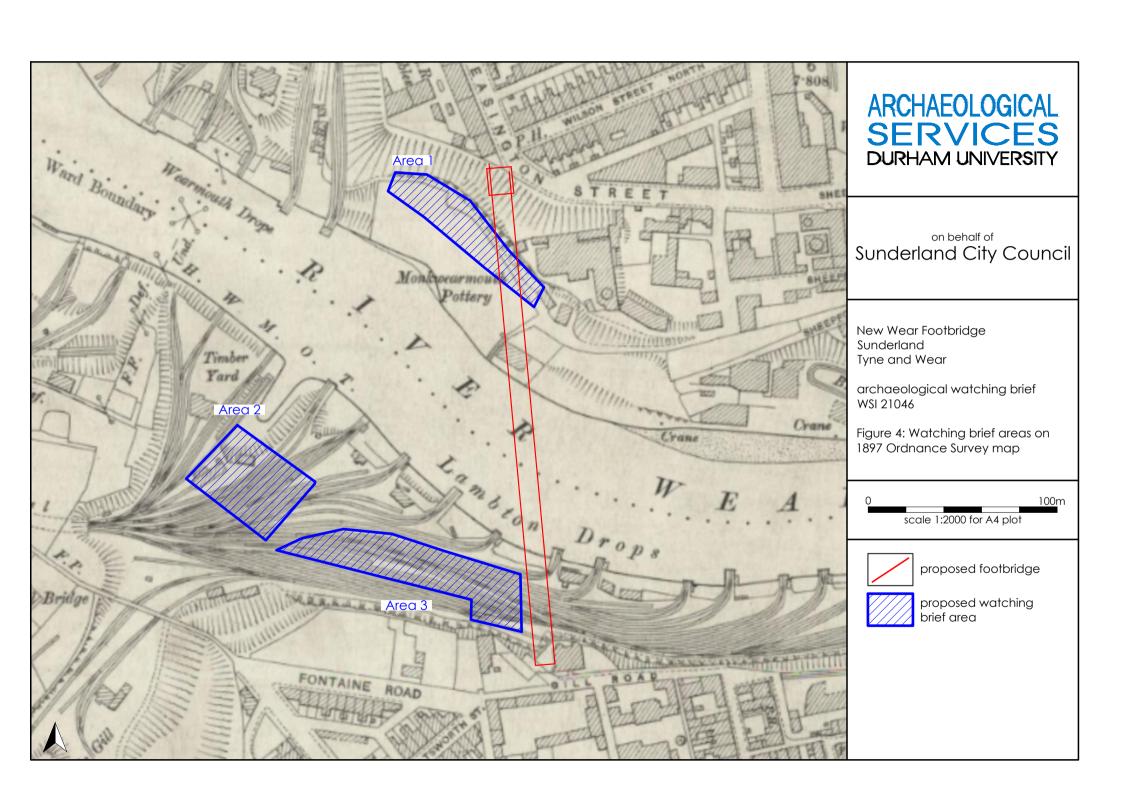
scale 1:20 000 for A4 plot

Figure 1: Site location









## **APPENDIX 3: Specification for the Landing Points**

## Tyne and Wear Archaeology Service

# Specification for Archaeological Monitoring at the River Wear Bridge, landing points Sunderland

Planning reference: 20/02391/LP3

TWAS reference: MON17495

Date of issue: 11/02/2022

Author: Sophie Laidler

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Address: Newcastle City Council, Planning, 9th Floor, Civic Centre, Newcastle upon Tyne,

NE1 8QH

Website: https://www.newcastle.gov.uk/services/planning-building-and-development/tyne-

and-wear-archaeology

To receive this document in a different format please contact the officer named above.

#### Introduction

The principles of this specification apply to archaeological fieldwork in Tyne and Wear including evaluation by trial trenching, excavation and archaeological monitoring (watching brief).

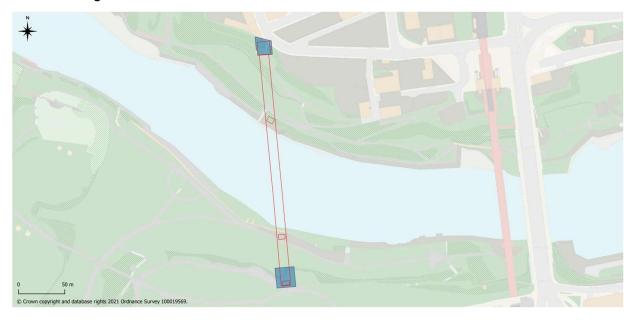
#### A Written Scheme of Investigation is not required for this work.

All fieldwork should be carried out to the relevant standards and guidance produced by the <a href="Chartered Institute for Archaeologists">Chartered Institute for Archaeologists</a>, and with reference to the wide range of specialist guidance produced by <a href="Historic England">Historic England</a>, in particular guidance on <a href="Archaeological Science">Archaeological Science</a> and <a href="Surveying and Recording Heritage">Surveying and Recording Heritage</a>. An A-Z of Historic England guidance was <a href="published">published</a> in 2018. Projects likely to involve the potential for environmental sampling and other scientific investigation should be discussed with the Historic England <a href="Science advisor for the North East">Science advisor for the North East</a>. If you are unsure which guidance applies, please contact the Tyne and Wear Archaeology Officer.

In addition, all fieldwork should be carried out in accordance with *Yorkshire, the Humber & the North East: a Regional Statement of Good Practice for Archaeology in the Development Process* (2019, available on request).

This specification is for the archaeological monitoring of groundworks associated with the construction of the pedestrian and cycle bridge across the River Wear. Archaeological monitoring is required at both the north and south bridge landing sides at Sheepfold and the Vaux site.

The watching brief areas are located at c. NZ 39367 57582 and c.NZ 39390 57327.



Archaeological monitoring is required to comply with condition 15 of planning consent 20/02391/LP3, in accordance with paragraph 205 of the National Planning Policy Framework.

The northern landing point of the bridge has the potential to impact archaeological remains associated with former industrial buildings, land-use and features. The southern landing point is located in an area where evidence of a prehistoric settlement dating from the Mesolithic through to the Iron Age has previously been identified (HER 7111, see Events 2447, 4364, 4684 and 4924).

In 2020 Archaeological Services Durham University produced a desk-based assessment for the wider area of the former Vaux site, Sunderland (Event 5097). Within the assessment area evidence for prehistoric settlement, ranging from the Mesolithic through to the Iron Age, was identified. Only limited evidence of Roman occupation has been identified within Sunderland. Both Medieval and post-medieval agricultural activity was identified in the assessment area. The riverbanks are identified to have potential for archaeological remains associated with former waggonways, coal drops and industrial buildings. In the report it is recommended that further archaeological work is required within the broader assessment area such as an archaeological excavation and watching briefs.

Additional archaeological investigations have been undertaken within the vicinity of the proposed works including, but not exclusive too:

Events 2447 (HER report reference 2004/114)

Pre-Construct Archaeology 2014, An Archaeological Evaluation at the former Vaux Brewery, St. Mary's Way, Sunderland, Tyne and Wear

Event 4364 (HER report reference 2015/157)

Archaeological Services Durham University 2015, St Mary's Way, Sunderland - Archaeological Monitoring, report 3657

Event 4680 (HER report reference 2017/100)

Archaeological Services Durham University 2017, Former Vaux Site Brewery, Sunderland - Excavation

Event 4684 (HER report reference 2017/104)

Archaeological Services Durham University Former Vaux Site Brewery 2017, Sunderland - Watching Brief

Event 4924 (HER report reference 2019/28)

Archaeological Services Durham University 2019, Former Vaux Brewery site Sunderland, post-excavation full analysis.

The appointed contractor must review the archaeological desk-based assessment (Event 5097) and the reports listed above before commencing works.

#### **Aims**

The overall aim of the project is to record and advance understanding of the significance of the archaeology to be lost as a result of the development of the site. The project should investigate the extent, character and chronology of the archaeological features present on the site, in order to understand and interpret them with reference to comparable sites.

The project should be carried out with reference to the relevant research agendas of the North-East Regional Research Framework for the Historic Environment (NERRF) (2006). The NERRF is <u>currently being revised</u>.

The following research agendas of the published NERRF includes the following key research priorities which may be addressed in part by this project:

The Mesolithic research agenda includes key research priorities such as Miv: The Mesolithic/Neolithic transition and Mv: Mesolithic lithics in the North-East.

The Neolithic and Early Bronze Age research agenda includes key research priorities such as NBi: Early settlement in an upland/lowland context and NBii: Settlement chronology.

The Late Bronze Age and Iron Age research agenda includes key research priorities such as Ii: Chronology and Iii: Settlement.

The Post-medieval research agenda includes key research priorities such as PM1: Early coal industry and coal use, PMii: Industrialisation and PMvii: Industrial intensification.

Hadrian's Wall is a <u>World Heritage Site</u> and has a specific Research Framework, *Frontiers of Knowledge* (<u>Vol 1 Vol 2</u>). This summarizes and assesses the existing knowledge base for Hadrian's Wall, and identifies and prioritises an agenda of key themes and a strategy for future research.

#### Monitoring by Tyne and Wear Archaeology Service

The fieldwork will be monitored by the Tyne and Wear Archaeology Officer. The Archaeological Contractor must give as much written notice as possible of the start of fieldwork, and keep the Tyne and Wear Archaeology Officer informed of progress, so that a site visit can be arranged if required.

#### **Health and Safety**

The appointed contractor must produce a risk assessment, or RAMS (Risk Assessment and Method Statement) if required by a main contractor, in line with legislative requirements and industry best practice. Health and Safety will always take priority over archaeological requirements. If any elements of the fieldwork cannot be completed due to health and safety issues, this should be clearly stated in the report.

#### Methodology

The archaeological fieldwork must be undertaken by professional archaeologists with proven experience of undertaking similar projects, and with appropriate skills and experience to undertake work to the highest professional standards.

Removal of topsoil or overburden by machine to the level of archaeological deposits or natural subsoil must be carried out using a toothless ditching bucket, except when ground conditions make a toothed bucket necessary. Machine work must be supervised by an archaeologist. Exposed archaeological deposits and structures must be cleaned by hand.

Monitoring – All ground disturbing work, including site preparation, foundation trenching and service trenching, must be monitored by an archaeologist to observe and record the presence or absence of any archaeological remains. If archaeological remains are identified the construction must stop to allow the excavation and recording of the archaeological remains. All archaeological features within the construction area should be fully excavated. This excepts Hadrian's Wall, where any remains must remain *in situ* and the construction methods varied to accommodate this.

#### Sampling

All fills and deposits should be assessed for their potential for environmental sampling and scientific dating, and samples taken accordingly. Archaeological deposits may have the potential for the preservation of a wide range of environmental evidence, as discussed in the <u>Historic England guidance</u>, and specialist advice should be sought prior to and during all projects. Consideration should be given to the nature of the site and the potential for

preservation by factors such as waterlogging. Scientific dating is particularly important for sites with little or no artefactual evidence.

#### Recording

The written record of archaeological features, stratigraphy, finds and samples should be undertaken using *pro forma* indices and record sheets, according to industry standards. Drawings (plans, sections and elevations) should be produced at standard scales as appropriate (1:10, 1:20, 1:50, 1:100 etc.). References to cardinal directions should use the <u>standard 16 point system</u> with no further subdivision. All site survey and the site location should be tied in to the British National Grid, and heights recorded relative to ordnance datum.

Digital photographs should be taken using a high-resolution DSLR camera with sensors exceeding 10 Mega Pixels, producing either TIFF files or RAW files which must be converted to TIFF before archive deposition. The photographs should be recorded in an index recording the image number, subject, any scales used, direction facing, date the picture was taken and who took it.

All photographs should be in focus, with an appropriate use of depth of field; they should be adequately exposed in good natural light, or where necessary well-lit by artificial means (not by camera-triggered electronic flash). The use of a tripod is recommended, particularly for the interior of buildings.

#### **Finds**

Bulk finds (pottery, animal bone etc.) should be collected by context. Small finds (metal objects, worked pottery sherds, worked bone etc.) should be recorded and located individually. Finds should be packed and stored to ensure minimal deterioration before their removal from site, according to the guidance in *First Aid for Finds* (D Watkinson and V Neal, third edition 2001, RESCUE/UKIC). A new edition of *First Aid for Finds* is expected in summer 2022.

For sites where large assemblages are anticipated, a selection strategy should be developed prior to fieldwork starting. The Chartered Institute for Archaeologists has produced a Toolkit to assist in the production of a strategy.

#### **Human Remains**

Human remains must be treated with dignity and respect by all parties on site including non-archaeological contractors, and in accordance with <a href="Historic England advice">Historic England advice</a>. Excavation areas should be shielded from public view where necessary. Where human remains are known to be present, an osteoarchaeologist should be involved in the project from the outset.

The excavation of human remains requires a licence from the <u>Ministry of Justice</u>. Where human remains are found unexpectedly, a licence must be obtained before proceeding with

excavation. If human remains are known to be present a licence should be obtained in advance of fieldwork.

In Christian burial grounds under Church of England jurisdiction a faculty is required rather than a licence, and reburial is generally carried out following any scientific investigation. The guidance issued by the Advisory Panel on the Archaeology of Burials in England (APABE) regarding <u>best practice</u> should be followed.

#### **Treasure**

Any finds which might fall under the <u>Treasure Act 1996</u> must be reported to the Coroner in whose district they were found within 14 days of discovery and to the <u>regional Finds Liaison</u> Officer.

#### Post-fieldwork assessment, analysis and reporting

Post-fieldwork assessment, analysis and reporting must be carried out to the relevant standards and guidance produced by the <u>Chartered Institute for Archaeologists</u>, and with reference to the wide range of specialist guidance produced by <u>Historic England</u>. All site records must be ordered, checked for internal consistency, quantified and indexed. All classes of artefacts and ecofacts must be assessed by suitably qualified and experienced specialists and consideration given to the potential for further analysis.

The report must contain the following sections as a minimum:

- 1. Non-technical summary
- 2. Introduction
- 3. Aims and objectives
- 4. Methodology
- 5. Results
- 6. Conclusions
- 7. Archive location
- 8. Appendices, including a copy of this specification
- 9. Illustrations
- 10. References and bibliography

The report must be submitted digitally as a pdf and as a bound paper report to the Tyne and Wear HER.

#### **Publication**

Significant archaeological sites will require publication in a regional or national journal (such as <u>Archaeologia Aeliana</u>, the <u>Durham Archaeological Journal</u>, the <u>Arbeia Journal</u>, or <u>Industrial Archaeology Review</u>) as appropriate. Other forms of public engagement and dissemination such as site open days, popular publications and interpretation panels may also be required for some sites.

#### **Archive**

Following assessment and reporting, the physical archive including all site records and retained artefacts and ecofacts must be prepared in accordance with the <u>ClfA Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives</u>, and with the requirements of the receiving body. For Tyne and Wear these are:

- Great North Museum: Hancock for Hadrian's Wall and the medieval town of Newcastle (contact Keeper of Archaeology andrew.parkin@newcastle.ac.uk).
- Tyne and Wear Archives and Museums for the rest of Tyne and Wear (Gateshead, outer Newcastle, North Tyneside, South Tyneside and Sunderland) (contact Alex Croom at Arbeia Roman Fort 0191 4544093).

The Great North Museum: Hancock charges a fee for archive deposition as described in the Archaeological Archive Deposition Policy.

The physical archive should be deposited with a second copy of the bound paper report.

The digital archive including all photographs, CAD files etc. must be submitted to the Tyne and Wear HER on an archive quality CD, and archived with the <u>Archaeology Data Service</u> (ADS). The likely cost of archiving with the ADS and their requirements for archived material should be established before tendering for the project. Proof of archiving with the ADS will be required by the Tyne and Wear HER.

The project must be registered with <u>OASIS</u> in order to signpost the project nationally, and the reference number included in the report.

If you have any queries about this specification, require full website links or notice any broken links, please contact the officer named above.

## **APPENDIX 4: Specification for the North and South Bridge Piers**

### Tyne and Wear Archaeology Service

## Specification for Archaeological Trial Trenching at the north and south bridge piers, River Wear Sunderland

Planning reference: 20/02391/LP3

TWAS reference: MON17495

Date of issue: 11/02/2022

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and-wear-archaeology

To receive this document in a different format please contact the officer named above.

#### Introduction

The principles of this specification apply to archaeological fieldwork in Tyne and Wear including evaluation by trial trenching, excavation and archaeological monitoring (watching brief).

#### A Written Scheme of Investigation is not required for this work.

All fieldwork should be carried out to the relevant standards and guidance produced by the <a href="Chartered Institute for Archaeologists">Chartered Institute for Archaeologists</a>, and with reference to the wide range of specialist guidance produced by <a href="Historic England">Historic England</a>, in particular guidance on <a href="Archaeological Science">Archaeological Science</a> and <a href="Surveying and Recording Heritage">Surveying and Recording Heritage</a>. An A-Z of Historic England guidance was <a href="published">published</a> in 2018. Projects likely to involve the potential for environmental sampling and other scientific investigation should be discussed with the Historic England <a href="Science advisor for the North East">Science advisor for the North East</a>. If you are unsure which guidance applies, please contact the Tyne and Wear Archaeology Officer.

In addition, all fieldwork should be carried out in accordance with *Yorkshire, the Humber & the North East: a Regional Statement of Good Practice for Archaeology in the Development Process* (2019, available on request).

This specification is for the archaeological trial trenching at the location of the proposed River Wear pedestrian and cycle bridge pier locations, located near c. NZ 39386 57378 and NZ 39374 57504.



Planning application 20/02391/LP3 for the construction of a high-level pedestrian and cycle bridge across the River Wear to link the north and south sides of the river between the Vaux site and the Sheepfolds was approved in March 2021.

Archaeological trial trenching is recommended to record and advance understanding of the significance of the archaeology in advance of the development of the site, in accordance with paragraph 205 of the National Planning Policy Framework. The proposed pedestrian bridge's support piers were originally considered for archaeological monitoring. Review of the latest plans for the piers raised concerns regarding the scale of works and the delays that could be caused if archaeological remains are discovered during the groundworks. To mitigate this risk, it is recommended that the sites of the bridge piers are archaeologically evaluated prior to the commencement of works in order to establish the archaeological potential of these areas and to inform future mitigations approaches.

The northern pier has potential to impact archaeological remains associated with industrial practices associated with the River Wear such as the former shipyard and possible lime kilns. The south pier has the potential to impact remains associated with prehistoric occupation.

In 2020 Archaeological Services Durham University produced a desk-based assessment for the wider area of the former Vaux site, Sunderland (Event 5097). Within the assessment area evidence for prehistoric settlement, ranging from the Mesolithic through to the Iron Age, was identified. Only limited evidence of Roman occupation has been identified within Sunderland. Both Medieval and post-medieval agricultural activity was identified in the assessment area. The riverbanks are identified to have potential for archaeological remains

associated with former waggonways, coal drops and industrial buildings. In the report it is recommended that further archaeological work is required within the broader assessment area such as an archaeological excavation and watching briefs.

Additional archaeological investigations have been undertaken within the vicinity of the proposed works including, but not exclusive too:

Events 2447 (HER report reference 2004/114)

Pre-Construct Archaeology 2014, An Archaeological Evaluation at the former Vaux Brewery, St. Mary's Way, Sunderland, Tyne and Wear

Event 4364 (HER report reference 2015/157)

Archaeological Services Durham University, 2015, St Mary's Way, Sunderland - Archaeological Monitoring, report 3657

Event 4680 (HER report reference 2017/100)

Archaeological Services Durham University 2017, Former Vaux Site Brewery, Sunderland - Excavation

Event 4684 (HER report reference 2017/104)

Archaeological Services Durham University Former Vaux Site Brewery 2017, Sunderland - Watching Brief

Event 4924 (HER report reference 2019/28)

Archaeological Services Durham University 2019, Former Vaux Brewery site Sunderland, post-excavation full analysis.

The appointed contractor must review the archaeological desk-based assessment (Event 5097) and the reports listed above before commencing works.

#### **Aims**

The overall aim of the project is to understand the significance of the archaeology to inform future archaeological mitigation strategies in association with the construction of the pedestrian bridge. The project should investigate the extent, character and chronology of the archaeological features present on the site, in order to understand and interpret them with reference to comparable sites.

The project should be carried out with reference to the relevant research agendas of the North-East Regional Research Framework for the Historic Environment (NERRF) (2006). The NERRF is <u>currently being revised</u>.

The following research agendas of the published NERRF includes the following key research priorities which may be addressed in part by this project:

The Mesolithic research agenda includes key research priorities such as Miv: The Mesolithic/Neolithic transition and Mv: Mesolithic lithics in the North-East.

The Neolithic and Early Bronze Age research agenda includes key research priorities such as NBi: Early settlement in an upland/lowland context and NBii: Settlement chronology.

The Late Bronze Age and Iron Age research agenda includes key research priorities such as Ii: Chronology and Iii: Settlement.

The Post-medieval research agenda includes key research priorities such as PM1: Early coal industry and coal use, PMii: Industrialisation and PMvii: Industrial intensification.

Hadrian's Wall is a <u>World Heritage Site</u> and has a specific Research Framework, *Frontiers of Knowledge* (Vol 1 Vol 2). This summarizes and assesses the existing knowledge base for Hadrian's Wall, and identifies and prioritises an agenda of key themes and a strategy for future research.

#### Monitoring by Tyne and Wear Archaeology Service

The fieldwork will be monitored by the Tyne and Wear Archaeology Officer. The Archaeological Contractor must give as much written notice as possible of the start of fieldwork, and keep the Tyne and Wear Archaeology Officer informed of progress, so that a site visit can be arranged if required.

#### **Health and Safety**

The appointed contractor must produce a risk assessment, or RAMS (Risk Assessment and Method Statement) if required by a main contractor, in line with legislative requirements and industry best practice. Health and Safety will always take priority over archaeological requirements. If any elements of the fieldwork cannot be completed due to health and safety issues, this should be clearly stated in the report.

#### Methodology

The archaeological fieldwork must be undertaken by professional archaeologists with proven experience of undertaking similar projects, and with appropriate skills and experience to undertake work to the highest professional standards.

Trial Trenching – two trial trenches measuring 1.5m by 10m at base should be excavated at the locations of the north and the south pier. If site conditions constrain the trial trenching, the location or size of the trenches may be varied in consultation with the Tyne and Wear Archaeology Officer. The proposed locations of the evaluation trenches are shown on the attached plan.

Larger features should be sampled at 50% and smaller features at 100%, unless they may be so significant as to merit preservation *in situ*. All stratigraphic relationships should be investigated where it is possible to do so within the confines of the trench. Where related features extend outside trenches, consideration should be given to extending trial trenches. Burials should be recorded and left in place unless they are known to be under threat of imminent disturbance such as planned geotechnical site investigation.

#### Sampling

All fills and deposits should be assessed for their potential for environmental sampling and scientific dating, and samples taken accordingly. Archaeological deposits may have the potential for the preservation of a wide range of environmental evidence, as discussed in the <a href="Historic England guidance">Historic England guidance</a>, and specialist advice should be sought prior to and during all projects. Consideration should be given to the nature of the site and the potential for preservation by factors such as waterlogging. Scientific dating is particularly important for sites with little or no artefactual evidence.

#### Recording

The written record of archaeological features, stratigraphy, finds and samples should be undertaken using *pro forma* indices and record sheets, according to industry standards. Drawings (plans, sections and elevations) should be produced at standard scales as appropriate (1:10, 1:20, 1:50, 1:100 etc.). References to cardinal directions should use the <u>standard 16 point system</u> with no further subdivision. All site survey and the site location should be tied in to the British National Grid, and heights recorded relative to ordnance datum.

Digital photographs should be taken using a high-resolution DSLR camera with sensors exceeding 10 Mega Pixels, producing either TIFF files or RAW files which must be converted to TIFF before archive deposition. The photographs should be recorded in an index recording the image number, subject, any scales used, direction facing, date the picture was taken and who took it.

All photographs should be in focus, with an appropriate use of depth of field; they should be adequately exposed in good natural light, or where necessary well-lit by artificial means (not by camera-triggered electronic flash). The use of a tripod is recommended, particularly for the interior of buildings.

#### **Finds**

Bulk finds (pottery, animal bone etc.) should be collected by context. Small finds (metal objects, worked pottery sherds, worked bone etc.) should be recorded and located individually. Finds should be packed and stored to ensure minimal deterioration before their removal from site, according to the guidance in *First Aid for Finds* (D Watkinson and V Neal, third edition 2001, RESCUE/UKIC). A new edition of *First Aid for Finds* is expected in summer 2022.

For sites where large assemblages are anticipated, a selection strategy should be developed prior to fieldwork starting. The Chartered Institute for Archaeologists has produced a Toolkit to assist in the production of a strategy.

#### **Human Remains**

Human remains must be treated with dignity and respect by all parties on site including non-archaeological contractors, and in accordance with <u>Historic England advice</u>. Excavation areas should be shielded from public view where necessary. Where human remains are known to be present, an osteoarchaeologist should be involved in the project from the outset.

The excavation of human remains requires a licence from the Ministry of Justice. Where human remains are found unexpectedly, a licence must be obtained before proceeding with excavation. If human remains are known to be present a licence should be obtained in advance of fieldwork.

In Christian burial grounds under Church of England jurisdiction a faculty is required rather than a licence, and reburial is generally carried out following any scientific investigation. The guidance issued by the Advisory Panel on the Archaeology of Burials in England (APABE) regarding <u>best practice</u> should be followed.

#### **Treasure**

Any finds which might fall under the <u>Treasure Act 1996</u> must be reported to the Coroner in whose district they were found within 14 days of discovery and to the <u>regional Finds Liaison</u> Officer.

#### Post-fieldwork assessment, analysis and reporting

Post-fieldwork assessment, analysis and reporting must be carried out to the relevant standards and guidance produced by the <u>Chartered Institute for Archaeologists</u>, and with reference to the wide range of specialist guidance produced by <u>Historic England</u>. All site records must be ordered, checked for internal consistency, quantified and indexed. All classes of artefacts and ecofacts must be assessed by suitably qualified and experienced specialists and consideration given to the potential for further analysis.

The report must contain the following sections as a minimum:

- 1. Non-technical summary
- 2. Introduction
- 3. Aims and objectives
- 4. Methodology
- 5. Results
- 6. Conclusions
- 7. Archive location
- 8. Appendices, including a copy of this specification
- 9. Illustrations
- 10. References and bibliography

The report must be submitted digitally as a pdf and as a bound paper report to the Tyne and Wear HER.

#### **Publication**

Significant archaeological sites will require publication in a regional or national journal (such as <u>Archaeologia Aeliana</u>, the <u>Durham Archaeological Journal</u>, the <u>Arbeia Journal</u>, or <u>Industrial Archaeology Review</u>) as appropriate. Other forms of public engagement and dissemination such as site open days, popular publications and interpretation panels may also be required for some sites.

#### **Archive**

Following assessment and reporting, the physical archive including all site records and retained artefacts and ecofacts must be prepared in accordance with the <u>ClfA Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives</u>, and with the requirements of the receiving body. For Tyne and Wear these are:

- Great North Museum: Hancock for Hadrian's Wall and the medieval town of Newcastle (contact Keeper of Archaeology andrew.parkin@newcastle.ac.uk).
- Tyne and Wear Archives and Museums for the rest of Tyne and Wear (Gateshead, outer Newcastle, North Tyneside, South Tyneside and Sunderland) (contact Alex Croom at Arbeia Roman Fort 0191 4544093).

The Great North Museum: Hancock charges a fee for archive deposition as described in the Archaeological Archive Deposition Policy.

The physical archive should be deposited with a second copy of the bound paper report.

The digital archive including all photographs, CAD files etc. must be submitted to the Tyne and Wear HER on an archive quality CD, and archived with the <u>Archaeology Data Service (ADS)</u>. The likely cost of archiving with the ADS and their requirements for archived material should be established before tendering for the project. Proof of archiving with the ADS will be required by the Tyne and Wear HER.

The project must be registered with <u>OASIS</u> in order to signpost the project nationally, and the reference number included in the report.

If you have any queries about this specification, require full website links or notice any broken links, please contact the officer named above.

# **APPENDIX 5: Specification for the Ground Investigation Test Pits**

### Tyne and Wear Archaeology Service

# Specification for Archaeological Monitoring of Ground Investigation test pits associated with the construction of the new High Level Wear footbridge, Sunderland

Planning reference: 20/02391/LP3

TWAS reference: MON17495

Date of issue: 11/03/2022 Author: Sophie Laidler

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Address: Newcastle City Council, Planning, 9th Floor, Civic Centre, Newcastle upon Tyne,

NE1 8QH

Website: https://www.newcastle.gov.uk/services/planning-building-and-development/tyne-

and-wear-archaeology

To receive this document in a different format please contact the officer named above.

#### Introduction

The principles of this specification apply to archaeological fieldwork in Tyne and Wear including evaluation by trial trenching, excavation and archaeological monitoring (watching brief).

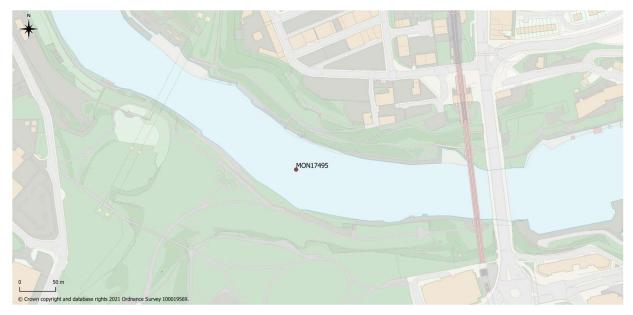
#### A Written Scheme of Investigation is not required for this work.

All fieldwork should be carried out to the relevant standards and guidance produced by the <a href="Chartered Institute for Archaeologists">Chartered Institute for Archaeologists</a>, and with reference to the wide range of specialist guidance produced by <a href="Historic England">Historic England</a>, in particular guidance on <a href="Archaeological Science">Archaeological Science</a> and <a href="Surveying and Recording Heritage">Surveying and Recording Heritage</a>. An A-Z of Historic England guidance was <a href="published">published</a> in <a href="2018">2018</a>. Projects likely to involve the potential for environmental sampling and other scientific investigation should be discussed with the Historic England <a href="Science advisor for the North East">Science advisor for the North East</a>. If you are unsure which guidance applies, please contact the Tyne and Wear Archaeology Officer.

In addition, all fieldwork should be carried out in accordance with *Yorkshire, the Humber & the North East: a Regional Statement of Good Practice for Archaeology in the Development Process* (2019, available on request).

This specification is for the archaeological monitoring of groundworks undertaken during the excavation of ground investigation test pits associated with the construction of the pedestrian and cycle bridge across the River Wear. Archaeological monitoring of the ground investigation test pits is required at both the north and south bridge landing sides at Sheepfold and the Vaux site.

The watching brief areas are located at either side of the River Wear near NZ 39367 57582 and NZ 39390 57327. The commissioning client will provide plans indicating the location of the proposed test pits.



Archaeological monitoring is required to comply with condition 15 of planning consent 20/02391/LP3, in accordance with paragraph 205 of the National Planning Policy Framework.

Ground works located north of the River Wear have the potential to impact archaeological remains associated with former industrial land-use, buildings and features. Works located south of the River Wear, have potential to encounter prehistoric remains dating from the Mesolithic through to the Iron Age (HER 7111, see Events 2447, 4364, 4684 and 4924) and or industrial deposits.

In 2020 Archaeological Services Durham University produced a desk-based assessment for the wider area of the former Vaux site, Sunderland (Event 5097). Within the assessment area evidence for prehistoric settlement, ranging from the Mesolithic through to the Iron Age, was identified. Only limited evidence of Roman occupation has been identified within Sunderland. Both Medieval and post-medieval agricultural activity was identified in the assessment area. The riverbanks are identified to have potential for archaeological remains associated with former waggonways, coal drops and industrial buildings. In the report it is recommended that further archaeological work is required within the broader assessment area such as an archaeological excavation and watching briefs.

Additional archaeological investigations have been undertaken within the vicinity of the proposed works including, but not exclusive too:

Events 2447 (HER report reference 2004/114)

Pre-Construct Archaeology 2014, An Archaeological Evaluation at the former Vaux Brewery, St. Mary's Way, Sunderland, Tyne and Wear

Event 4364 (HER report reference 2015/157)

Archaeological Services Durham University 2015, St Mary's Way, Sunderland - Archaeological Monitoring, report 3657

Event 4680 (HER report reference 2017/100)

Archaeological Services Durham University 2017, Former Vaux Site Brewery, Sunderland - Excavation

Event 4684 (HER report reference 2017/104)

Archaeological Services Durham University Former Vaux Site Brewery 2017, Sunderland - Watching Brief

Event 4924 (HER report reference 2019/28)

Archaeological Services Durham University 2019, Former Vaux Brewery site Sunderland, post-excavation full analysis.

The appointed contractor must review the archaeological desk-based assessment (Event 5097) and the reports listed above before commencing works.

#### **Aims**

The overall aim of the project is to record and advance understanding of the significance of the archaeology to be lost as a result of ground investigation test pits and for observations to be used to inform future programmes of archaeological works associated with this scheme. The project should investigate the extent, character and chronology of the archaeological features present on the site, in order to understand and interpret them with reference to comparable sites.

The project should be carried out with reference to the relevant research agendas of the North-East Regional Research Framework for the Historic Environment (NERRF) (2006). The NERRF is <u>currently being revised</u>.

The following research agendas of the published NERRF includes the following key research priorities which may be addressed in part by this project:

The Mesolithic research agenda includes key research priorities such as Miv: The Mesolithic/Neolithic transition and Mv: Mesolithic lithics in the North-East.

The Neolithic and Early Bronze Age research agenda includes key research priorities such as NBi: Early settlement in an upland/lowland context and NBii: Settlement chronology.

The Late Bronze Age and Iron Age research agenda includes key research priorities such as Ii: Chronology and Iii: Settlement.

The Post-medieval research agenda includes key research priorities such as PM1: Early coal industry and coal use, PMii: Industrialisation and PMvii: Industrial intensification.

Hadrian's Wall is a <u>World Heritage Site</u> and has a specific Research Framework, *Frontiers of Knowledge* (<u>Vol 1 Vol 2</u>). This summarizes and assesses the existing knowledge base for Hadrian's Wall, and identifies and prioritises an agenda of key themes and a strategy for future research.

#### Monitoring by Tyne and Wear Archaeology Service

The fieldwork will be monitored by the Tyne and Wear Archaeology Officer. The Archaeological Contractor must give as much written notice as possible of the start of fieldwork, and keep the Tyne and Wear Archaeology Officer informed of progress, so that a site visit can be arranged if required.

#### **Health and Safety**

The appointed contractor must produce a risk assessment, or RAMS (Risk Assessment and Method Statement) if required by a main contractor, in line with legislative requirements and industry best practice. Health and Safety will always take priority over archaeological requirements. If any elements of the fieldwork cannot be completed due to health and safety issues, this should be clearly stated in the report.

#### Methodology

The archaeological fieldwork must be undertaken by professional archaeologists with proven experience of undertaking similar projects, and with appropriate skills and experience to undertake work to the highest professional standards.

Removal of topsoil or overburden by machine to the level of archaeological deposits or natural subsoil must be carried out using a toothless ditching bucket, except when ground conditions make a toothed bucket necessary. Machine work must be supervised by an archaeologist. Exposed archaeological deposits and structures must be cleaned by hand.

Monitoring – All ground disturbing work associated with the excavation of ground investigation test pits must be monitored by an archaeologist to observe and record the presence or absence of any archaeological remains. If archaeological remains are identified the works must stop to allow the excavation and recording of the archaeological remains. All archaeological features within the construction area should be fully excavated. This excepts Hadrian's Wall, where any remains must remain *in situ* and the construction methods varied to accommodate this.

#### Sampling

All fills and deposits should be assessed for their potential for environmental sampling and scientific dating, and samples taken accordingly. Archaeological deposits may have the potential for the preservation of a wide range of environmental evidence, as discussed in the <a href="Historic England guidance">Historic England guidance</a>, and specialist advice should be sought prior to and during all projects. Consideration should be given to the nature of the site and the potential for preservation by factors such as waterlogging. Scientific dating is particularly important for sites with little or no artefactual evidence.

#### Recording

The written record of archaeological features, stratigraphy, finds and samples should be undertaken using *pro forma* indices and record sheets, according to industry standards. Drawings (plans, sections and elevations) should be produced at standard scales as appropriate (1:10, 1:20, 1:50, 1:100 etc.). References to cardinal directions should use the <u>standard 16 point system</u> with no further subdivision. All site survey and the site location should be tied in to the British National Grid, and heights recorded relative to ordnance datum.

Digital photographs should be taken using a high-resolution DSLR camera with sensors exceeding 10 Mega Pixels, producing either TIFF files or RAW files which must be converted to TIFF before archive deposition. The photographs should be recorded in an index recording the image number, subject, any scales used, direction facing, date the picture was taken and who took it.

All photographs should be in focus, with an appropriate use of depth of field; they should be adequately exposed in good natural light, or where necessary well-lit by artificial means (not by camera-triggered electronic flash). The use of a tripod is recommended, particularly for the interior of buildings.

#### **Finds**

Bulk finds (pottery, animal bone etc.) should be collected by context. Small finds (metal objects, worked pottery sherds, worked bone etc.) should be recorded and located individually. Finds should be packed and stored to ensure minimal deterioration before their removal from site, according to the guidance in *First Aid for Finds* (D Watkinson and V Neal, third edition 2001, RESCUE/UKIC). A new edition of *First Aid for Finds* is expected in summer 2022.

For sites where large assemblages are anticipated, a selection strategy should be developed prior to fieldwork starting. The Chartered Institute for Archaeologists has produced a <u>Toolkit</u> to assist in the production of a strategy.

#### **Human Remains**

Human remains must be treated with dignity and respect by all parties on site including non-archaeological contractors, and in accordance with <u>Historic England advice</u>. Excavation areas should be shielded from public view where necessary. Where human

remains are known to be present, an osteoarchaeologist should be involved in the project from the outset.

The excavation of human remains requires a licence from the Ministry of Justice. Where human remains are found unexpectedly, a licence must be obtained before proceeding with excavation. If human remains are known to be present a licence should be obtained in advance of fieldwork.

In Christian burial grounds under Church of England jurisdiction a faculty is required rather than a licence, and reburial is generally carried out following any scientific investigation. The guidance issued by the Advisory Panel on the Archaeology of Burials in England (APABE) regarding best practice should be followed.

#### **Treasure**

Any finds which might fall under the <u>Treasure Act 1996</u> must be reported to the Coroner in whose district they were found within 14 days of discovery and to the <u>regional Finds Liaison</u> Officer.

#### Post-fieldwork assessment, analysis and reporting

Post-fieldwork assessment, analysis and reporting must be carried out to the relevant standards and guidance produced by the <u>Chartered Institute for Archaeologists</u>, and with reference to the wide range of specialist guidance produced by <u>Historic England</u>. All site records must be ordered, checked for internal consistency, quantified and indexed. All classes of artefacts and ecofacts must be assessed by suitably qualified and experienced specialists and consideration given to the potential for further analysis.

The report must contain the following sections as a minimum:

- 1. Non-technical summary
- 2. Introduction
- 3. Aims and objectives
- 4. Methodology
- 5. Results
- 6. Conclusions
- 7. Archive location
- 8. Appendices, including a copy of this specification
- 9. Illustrations
- 10. References and bibliography

The report must be submitted digitally as a pdf and as a bound paper report to the Tyne and Wear HER.

#### **Publication**

Significant archaeological sites will require publication in a regional or national journal (such as <u>Archaeologia Aeliana</u>, the <u>Durham Archaeological Journal</u>, the <u>Arbeia Journal</u>, or Industrial Archaeology Review) as appropriate. Other forms of public engagement and

dissemination such as site open days, popular publications and interpretation panels may also be required for some sites.

#### **Archive**

Following assessment and reporting, the physical archive including all site records and retained artefacts and ecofacts must be prepared in accordance with the <u>ClfA Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives</u>, and with the requirements of the receiving body. For Tyne and Wear these are:

- Great North Museum: Hancock for Hadrian's Wall and the medieval town of Newcastle (contact Keeper of Archaeology andrew.parkin@newcastle.ac.uk).
- Tyne and Wear Archives and Museums for the rest of Tyne and Wear (Gateshead, outer Newcastle, North Tyneside, South Tyneside and Sunderland) (contact Alex Croom at Arbeia Roman Fort 0191 4544093).

The Great North Museum: Hancock charges a fee for archive deposition as described in the <u>Archaeological Archive Deposition Policy</u>.

The physical archive should be deposited with a second copy of the bound paper report.

The digital archive including all photographs, CAD files etc. must be submitted to the Tyne and Wear HER on an archive quality CD, and archived with the <u>Archaeology Data Service (ADS)</u>. The likely cost of archiving with the ADS and their requirements for archived material should be established before tendering for the project. Proof of archiving with the ADS will be required by the Tyne and Wear HER.

The project must be registered with <u>OASIS</u> in order to signpost the project nationally, and the reference number included in the report.

If you have any queries about this specification, require full website links or notice any broken links, please contact the officer named above.

## **APPENDIX 6: OASIS Summary**

# **OASIS Summary for cfaarcha1-523603**

OASIS ID (UID)	cfaarcha1-523603
Project Name	Watching Brief at New Wear Footbridge, Sunderland, Sunderland,
,	United Kingdom
Sitename	New Wear Footbridge, Sunderland, Sunderland, United Kingdom
Sitecode	RWEA
Project Identifier(s)	
Activity type	Watching Brief
Planning Id	
Reason For Investigation	Planning: Post determination
Organisation Responsible for work	CFA Archaeology Ltd
Project Dates	19-May-2023 - 16-Nov-2023
Location	New Wear Footbridge, Sunderland, Sunderland, United Kingdom
	NGR : NZ 39668 56967
	LL: 54.90585126034916, -1.382872872054577
	12 Fig : 439668,556967
	NGR : NZ 39334 57468
	LL: 54.910385085787865, -1.388010264019573
	12 Fig : 439334,557468
Administrative Areas	Country : England
	County/Local Authority : Sunderland
	Local Authority District : Sunderland
	Parish: Sunderland, unparished area
Project Methodology	The watching brief monitored the excavation works in three development areas. Area 1 on the north embankment, for the construction of the North Crane Pad, and centred at c. NZ 39351 57562; Area 2 on the south embankment, for the construction of the South Crane Pad, and centred at c. NZ 39331 57373; and Area 3 also on the south embankment, for the construction of the South Compound, immediately to the north-west of Area 2 and centred at c. NZ 39289 57408.
	Archaeological monitoring was also required for additional groundworks at eh sites of the bridge piers and landing points. The northern bridge pier is located to the SSE of Area 1, centred at c. NZ 39374 57504. The southern bridge pier is located to the north-east of Area 2, centred at c. NZ 39386 57378. The northern landing point is situated on Easington Street, adjacent to the Grade 2 Listed former North Eastern Railways Stables building, and centred at c. NZ 39367 57582.
Project Results	An archaeological watching brief was carried out by CFA Archaeology Ltd between May and November 2023 at the New Wear Footbridge in Sunderland, Tyne and Wear. The watching brief monitored the groundworks in three areas of proposed development: the site of two crane pads and a site compound, the north bridge pier and landing point and the south bridge pier. Archaeological remains dating from the late post-medieval and modern eras, in particular from the early nineteen century onwards, were encountered on the northern and southern banks and are likely related to the industrial development of the River Wear in the City of Sunderland.
Keywords	
Funder	Private or public corporation Volker Stevin Ltd



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